

Date: Wednesday, 7/12/2006 3:24:21 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : CLAMP
 Job Number : 27877
 Estimate Number : 10623
 P.O. Number : N/A
 This Issue : 7/12/2006 S.O. No. : N/A
 Prsht Rev. : NC
 First Issue : N/A Type : PURCHASED PARTS
 Previous Run : 25770
 Part Number : D2947
 Drawing Number : D2947 REV A1
 Project Number : N/A
 Drawing Revision : A1
 Material : N/A
 Due Date : 8/15/2006 Qty: 100 Um: Each
 Written By :
 Checked & Approved By :
 Comment : Est: A 00.01.14 New issue EC

Additional Product

Job Number:

Seq. #: Machine Or Operation: Description :

1.0 PG PURCHASING

Comment: PURCHASING

Issue P/O: 1673
 Laser cut as per Dwg D2947
 Material release note required

CL 07113104

(100)

2.0 D2947B Clamp

Comment: Qty.: 1.0000 Each(s)/Unit Total: 100.0000 Each(s)
 Clamp

3.0 PACKAGING 1 PACKAGING RESOURCE #1

Comment: PACKAGING RESOURCE #1

Receieve & Inspect for Transit Damage
 Ensure Material Release Note is attached

LB 06/08/03

(100)

4.0 QC6 DIMENSIONAL CHECK

Comment: DIMENSIONAL CHECK

(9.312" center to center) N/A

100-14

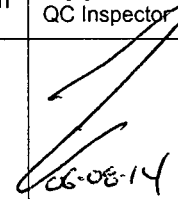
5.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1

Comment: SMALL & MEDIUM FAB RESOURCE 1

1- Deburr any rough edges
 2- Bend as per Dwg D2947

1- tumble 540 06:03:15 100
 N/A

(100)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector
06-08-14	5.0	Add tumble : remove at step 7.0	FF	06.08.18	100		 06-08-14

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 06/09/06

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Wednesday, 7/12/2006 3:24:21 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: CLAMP

Job Number: 27877

Part Number: D2947

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



06-08-20

Comment: INSPECT WORK TO CURRENT STEP

7.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Tumble

N/A

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *57378*

4/1/21 100
DB 06/08/03

(100)

9.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06/09/06

Job Completion



C206102121

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

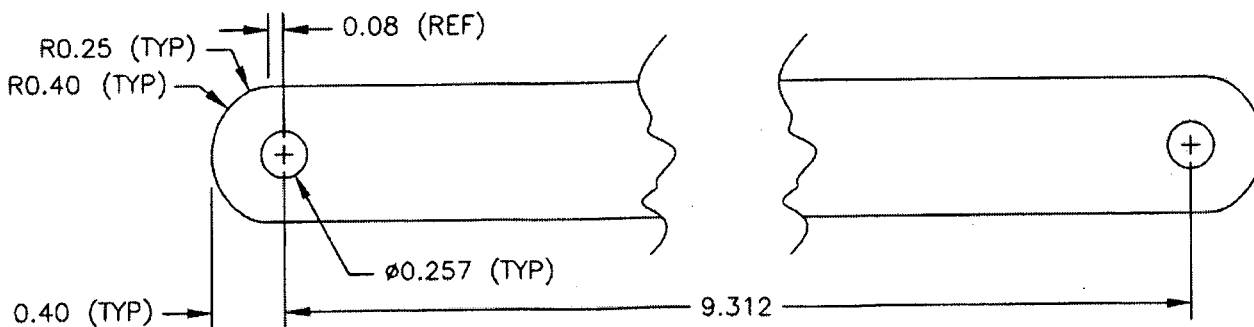
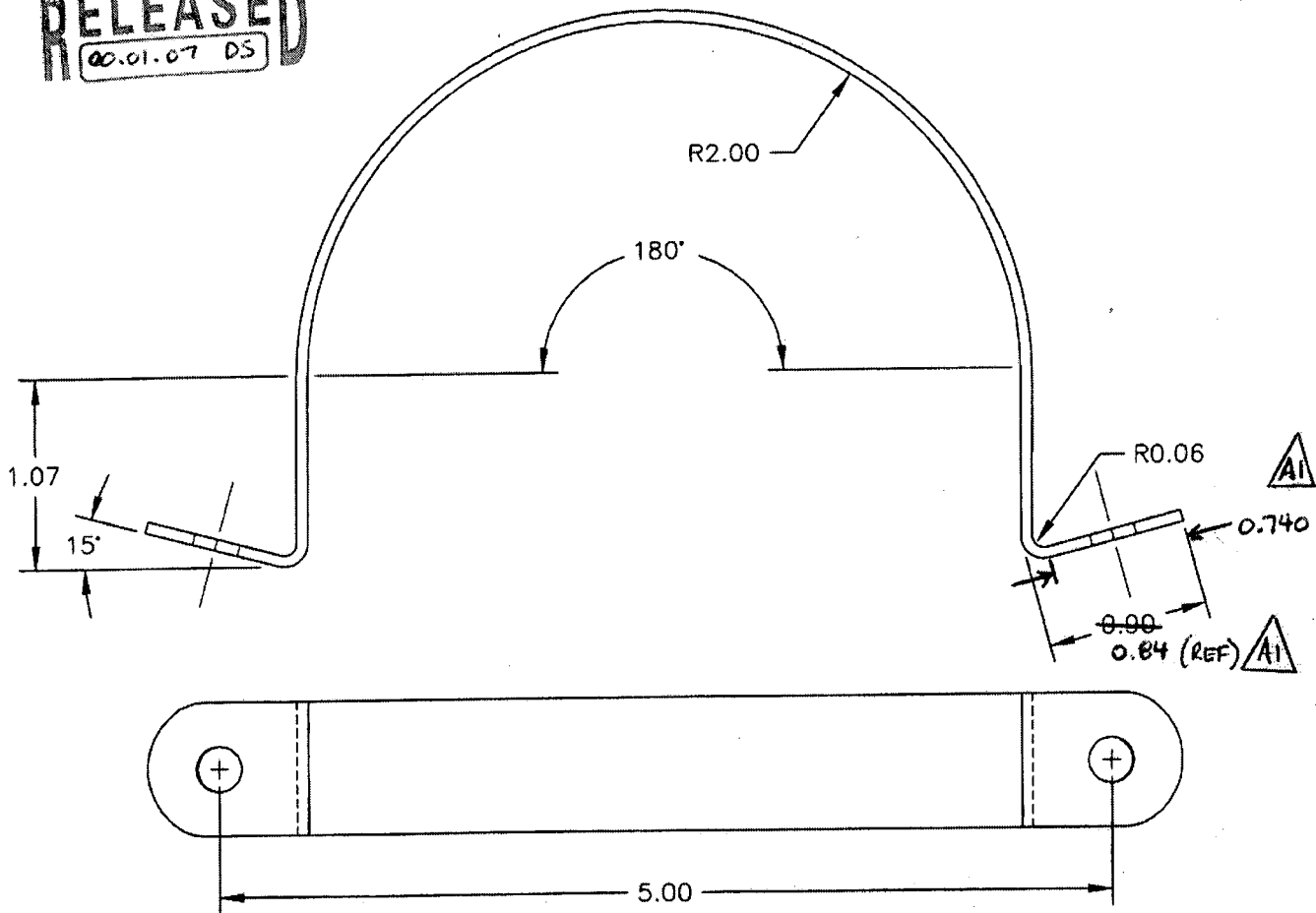
NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____



DESIGN 1	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 1	APPROVED 1	DRAWING NO. D2947	REV. A SHEET 1 OF 1
DATE 00.01.06		TITLE CLAMP	SCALE 1:1
A	00.01.06	NEW ISSUE	

RELEASED
00.01.07 DS



D2947 FLAT PATTERN

MATERIAL: AISI 304/316 SS 0.063 THICK x 0.75 WIDE
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

01.09.07 Add 0.740 dimension; 0.84 into 0.90



AK Steel Corporation
Metallurgical Test Report
Coshocton Works
Coshocton, OH 43812

Page 1

Load No. 7883163

SRN No. 7883163

C
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FERGUSON METALS INC.
3475 SYMMES ROAD
HAMILTON, OH 42015

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FERGUSON METALS INC
FERGUSON METALS INC/AERO
METAL PROCESSING DIVISION
3475 SYMMES ROAD
HAMILTON, OH 45015

MILL ORDER NO.
271940-0533

PROCESSOR ORDER NO.
01008517

BUYERS ORDER NO.
01008517

PART NO.

11156

ENGLISH UNITS --PRODUCT-- METRIC UNITS
0620 NOM 36.0000 X COIL

SKID ID	PIECE	HEAT	PARENT COIL ID	NET WEIGHT
SKD759479	1	7360176	0686188-02B	12,970 LBS. 5,883 KG.
TOTAL SKIDS	TOTAL PIECES			TOTAL NET WEIGHT
1	1			12,970 LBS. 5,883 KG.

L-Ladle Analysis of Heat

P-Product Analysis of Parent Coil

CHEMICAL ANALYSIS

ID	C	MN	P	S	SI	CR	NI	MO	N	CU						
L 7360176	.012	1.30	.025	.001	.45	18.24	8.61	.32	.037	.35						

SHIPPING DATE: 04/18/2006

REMARKS:

THIS MATERIAL WAS MELTED AND MANUFACTURED IN THE U.S.A.
NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA
SOURCE, AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING
ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.
COILED PRODUCTS CONTAIN NO WELDS
MATERIAL MEETS REQUIREMENTS OF TYPES 304 & 304L FOR REFERENCED, SPECIFICATIONS

PRODUCT DESCRIPTION

CR SHT TYPE 302/304/304L STAINLESS #2B FINISH SLIT EDGE * AMS 5513 H WITH AK STEEL DOCUMENTED EXCEPTIONS DATED 07/11/05 TO PARA
GRAPHS * ASTM A 240 -04 EX PARA 3.1.9 ELONG WILL BE DETERMINED BY ASTM E 8 * AMS 5511 H WITH AK STEEL DOCUMENTED EXCEPTIONS DATE
D 07/11/05 TO PARAGRAPHS * AMS 5516 N WITH AK STEEL DOCUMENTED EXCEPTIONS DATED 03/30/06 TO PARAGRAPHS-1.2. PRODUCT END USE; 2. SPE
C. REVIEW AND CERTIFICATION; 3.4 * ASTM A 666 -03 * MILS-5059 D-AMEND-3 * UNS-S30403 9TH EDITION * FMI-304L/304/302 ISSUE 7, 2/
13/06 * ASME SA-240 SECTION II PART A (2004 ED, 2005 ADDENDA) EX PARA 3.1.7 DIMENSIONAL TOLS FROM ASME SA-480 2004 ED APPLY * UN
S-S30400/S30200

PARENT COIL ID	POS (F/T)	DIR (L, T, D)	COND	% ELONG 2 INCH MEASURED	TENSILE STRENGTH (KSI)	Y.S. .2% OFFSET (KSI)	ROCKWELL HARDNESS Tail	ROCKWELL HARDNESS Front			
0686188-02B	T	T	A.S.T.M	58.6	83.2	37.6	B 78	B 80			

REVIEWED BY Q.C.


Date 4/18/06 by [Signature]

*** CONTINUED ON NEXT PAGE ***

Lynne Harper
Lynne Harper

records in our files the material shipped on you
purchase order conforms to the following.
3475 Symmes Road Hamilton, OH 4501
12A Trowbridge Drive Bethel, CT 0680

Sales#: 01082059
QTY: 1

		AK Steel Corporation Metallurgical Test Report Coshocton Works Coshocton, OH 43812		Page 2							
				Load No. 7883163 SRN No. 7883163							
C U S T O M E R	FERGUSON METALS INC. 3475 SYMMES ROAD HAMILTON, OH 42015		S H I P T O	FERGUSON METALS INC FERGUSON METALS INC/AERO METAL PROCESSING DIVISION 3475 SYMMES ROAD HAMILTON, OH 45015		MILL ORDER NO. 271940-0533 PART NO. 11156 ENGLISH UNITS --PRODUCT-- METRIC UNITS .0620 NOM 36.0000 X COIL	PROCESSOR ORDER NO. 01008517	BUYERS ORDER NO. 01008517			
PARENT COIL ID	POS (F/T)	DIR (L, T, D)	COND	ASTM A 262 PRACTICE E	GRAIN SIZE ASTM E112	BEND 180 1T					
0686188-02B	T		A.S.T.M	PASS	8.50	PASS					
0686188-02B	F		A.S.T.M	PASS	8.50	PASS					
THE CHEMICAL ANALYSIS AND PHYSICAL OR MECHANICAL TESTS REPORTED ABOVE ARE CORRECT AS CONTAINED IN THE RECORDS OF THE CORPORATION. ALL TESTING IS DONE IN ACCORDANCE WITH A.S.T.M STANDARDS UNLESS OTHERWISE NOTED						"THIS CERTIFIED TEST REPORT HAS BEEN DELIVERED TO A CONSIGNEE OF MATERIAL PURCHASED FROM AK Steel Corporation. TO AVOID THE POSSIBILITY OF ITS MISUSE ON DELIVERY OF THE REPORT TO A THIRD PARTY IT MUST BE RECERTIFIED BY AND UNDER THE NAME OF SUCH CONSIGNEE"					
AK Steel Corporation MWQC#0049 5/99						SIGNED <i>Eric Raymond</i> DATE 04/18/2006 TIME 21:39 PM APPLICATION ENGINEER					